

SYSTEM AND METHOD FOR DETERMINING CAPACITANCE FOR LARGE-SCALE INTEGRATED CIRCUITS

ABSTRACT OF THE DISCLOSURE

For use in an integral equation formulation of capacitance, a system for, and method of, generating a representation of charge distribution for a given capacitive structure (which may be an integrated circuit). In one embodiment, the system includes: (1) a charge variation function generator that creates a multidimensional charge variation function that is not directly dependent on a conductive geometry of the structure and (2) a conductive geometry generator, associated with the charge variation generator, that creates a conductive geometry that is independent of charge variation in the structure, the charge variation function and the conductive geometry employable in the integral equation formulation to reduce a complexity thereof.